Installation Guide
300 Series

MONITOR AUDIO®

Installation guide

300 Series

The 300 Series models utilise RST® bass drivers and a high specification version of the C-CAM® gold dome tweeter. These models offer a higher grade of performance, and greater flexibility.

The RST® (Rigid Surface Technology) drivers are more commonly found in our Gold Signature Series. The drivers used are our second generation of our RST®. The cone profile has been further refined using "Finite Element Analysis", to provide a smoother response and reduced break up. The 300 Series is also the first range of speakers to feature a 8" version of the RST® driver.

The pivoting tweeter is based on Monitor Audio's famous 25mm gold C-CAM® dome. Improvements to the surround and motor system have extended the frequency response to beyond 30 kHz, so that it is ready to exploit HD digital cinema and audio formats.

The LCR models employ a unique Inverted Dual Concentric (IDC®) pivoting mid-range/tweeter module, providing up to 18 degrees of movement and allowing the sound to be directed towards the desired listening zone. These models offer superior performance and flexibility over typical 2-way or fixed angle speaker designs.

The FX model features a switchable di-pole mode. The technology behind this is also found on the Gold Signature surround speakers, the GSFX. There is a three position switch to control this feature. It can be set to bi-pole (normal operation), di-pole, or trigger. When set to trigger, the di-pole mode is controlled by a 12v trigger found in high end AV amplifiers/receivers. Di-pole mode enhances the whole movie experience when used in a 7.1 channel system. For configuration information please go to www.monitoraudio.co.uk/
support.

The high frequency level control together with boundary compensation control facilitates a wider range of possible adjustments. See page 2.

Introduction

Please read this installation guide carefully before proceeding.

ALSO AVAILABLE: Pre-construction brackets. These are for use when installing any Custom Installation product before the plaster board/ rock wall, is fitted. They show the location of the speakers to the builder, allow pre-wiring and give them a solid secure edge to cut around. Please ask your dealer about these brackets and to confirm which is correct for your installation.

PLEASE CHECK YOU HAVE THE FOLLOWING ITEMS IN THIS KIT BEFORE PROCEEDING:

- 1 x Complete speaker & tweeter assembly.
- 1 x Grille (which can be painted).
- 1 x Mounting cut out template (in packaging).
- 1 x Plastic paint mask (for covering the baffle while painting the frame).
- 1 x Self adhesive grille membrane scrim (to be attached to the inside the grille after it has been painted).
- 1 x Guarantee card in this manual.

Prior to Installation Check the Following:

- Please check the minimum depth of the product (according to the specifications sheet) is correct for the assembly to fit into recess.
- The fixing clamps require a minimum of 25mm (1 Inch) of surface area around the cut-out hole to ensure a secure fixing!
- Series 300 loudspeakers are splash and moisture proof, so they can be used in bathrooms, pool areas, etc. DO NOT allow them to be in constant contact with water/moisture.
- The fixing clamps will operate on ceilings/walls with a minimum thickness of 9mm (3/8 Inches) to a maximum depth of 32mm (1¼ Inches).
- Do not attempt to fix these speakers to your ceiling/wall if you are unsure of your ability to provide a secure and safe fixing. IF IN DOUBT CONTACT YOUR LOCAL AUTHORISED MONITOR AUDIO DEALER.
- Ensure that there are no water pipes, air ducts or electricity cables running immediately behind the cut out area!
- Please work from secure steps or scaffold and avoid trailing wires for your safety and those around you.
- Always turn off the amplifier or other devices in the system when connecting these speakers.

Installation procedures

Painting

NOTE: If you are choosing to paint your 300 Series loudspeaker, we recommend you do this prior to installation by following these simple steps:

1. Remove the membrane scrim from the inside of the grille (do not fit grille to speaker frame).
2. Place paint mask over the speaker baffle.
3. Paint both the frame and the grille at the same time and with the same batch of paint (if they are to be the same colour).
4. When they are both dry, remove the paint mask from the baffle, and place the spare membrane scrim (in the packaging) into the inside of the grille.
5. Your product(s) are now ready to install, including fitting the grille.

Using Pre-Construction Brackets

If the holes have been pre-cut, simply refer to step 4 onwards (below) for full fitting instructions.
If pre-construction brackets have been used prior to the fixing of plaster board/ sheet rock and the holes have not been cut, locate the pre-construction brackets and cut around the inside edge of the bracket. Locate the speaker cable, connect to the sprung terminals and fit the speaker. Refer to the fitting instructions below (step 4 onwards).
To fine-tune the speakers please refer to the high frequency control and boundary compensation details below.

Using the Fixing Template

1. Use template to locate position of cut out. The adhesive backing allows for repositioning a number of times.
2. Draw around diameter of the template.
3. Remove template and cut hole.
4. Locate speaker cable and connect by pushing the terminals in and releasing to clamp the cables.
5. Fit product into prepared hole and tighten fixing clamps. These will move outwards automatically upon tightening! DO NOT OVER TIGHTEN! Once contact is made 2-3 turns are all that is required.
6. To fine-tune the speakers please refer to the high frequency control and boundary compensation details below. Also, when installing the FX models consider what position the di-pole switch needs to go in, depending on application.

High Frequency control

The factory H.F setting provides a flat or odB level, which will suit the majority of typical installations.
Setting the switch in the +3dB position will add brightness and additional clarity to the system. This may be effective in a room with a large amount of soft furnishings.
Setting the switch in the -3dB position will reduce the brightness and provide a duller sound. This may be effective in a room with few soft furnishings, or in an installation with a wooden floor.

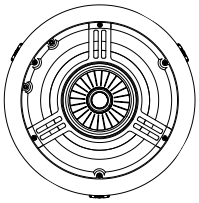
Mid Frequency control

The factory M.F control setting provides a flat or odB level, which will suit the majority of typical installations. However, it is possible to fine-tune the sound to suit a room's characteristics or preferred listening tastes. Setting the switch in the +3dB position will add presence and additional clarity to the system, particularly in the vocal region. This may be effective for better resolution of dialogue and speech, or in an installation where the listening position is a large distance from the speaker. Setting the switch in the -3dB position will reduce the presence and the system will sound more 'laid back'. This may be effective where the speaker will be played for background music, or where the listening position is situated close to the speaker.

Boundary Compensation control

The bass drivers are optimised to work in a large closed cavity, with minimal damping. This should provide a natural roll off characteristic that will ensure optimum performance and bass extension. However, it may be necessary in certain installations to locate the speaker close to a corner apex of the ceiling. In this situation the bass region will become accentuated and uneven, resulting in unsuitable balance characteristics. The effect is similar to placing a conventional hi-fi speaker in the corner of a room. The boundary compensation provides a gentle roll off character whilst preserving the extreme low frequency output. The switch position is either on or off.

C380-LCR



C-CAM® | RST® | IDC
Tri-Grip | H.F | Boundary

Frequency Response
45 Hz - 30 KHz

Impedance (nominal)
6 Ohms

Sensitivity (1W@1M)
90 dB

Maximum SPL
112 dBA

Power Handling (R.M.S)
150 W

Recommended Amp
15 - 150 W

Crossover Frequency / Slope
Mid: 250 Hz @ 6 dB / Octave
High: 3 KHz @ 12 dB / Octave

Driver
1 x 8" C-CAM® cone bass driver featuring RST®
Pivoting inverted dual concentric module (IDC) housing:- 1 x 4" C-CAM® RST® 'inverted' mid-range driver
1 x 1" (25 mm) C-CAM® gold dome tweeter

Overall Diameter
286 mm (11 1/4 inch)

Overall Depth
161 mm (6 5/16 inch)

Cut-out Hole Diameter
247 mm (9 3/4 inch)

Mounting Depth
156.5 mm (6 3/16 inch)

Controls
+3db / 0dB / -3dB
High Frequency level switch &
Boundary Compensation switch

Fixing Type
3 position Tri-Grip dog fixings

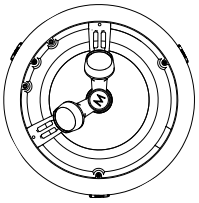
Cable Connection
Gold plated 'push' type terminals

Construction Material
Frame: Mineral filled ABS plastic (UL94-VO rated, RoHS compliant)
Baffle: Die-cast Aluminium

Pre-construction Bracket
CB8 (Green)

Weight Kg (lb)
3.64 Kg (8 lb)

C380-FX



C-CAM® | RST® | Tri-Grip
Di-Pole | H.F

Frequency Response
45 Hz - 30 KHz

Impedance (nominal)
6 Ohms

Sensitivity (1W@1M)
90 dB

Maximum SPL
111.6 dBA

Power Handling (R.M.S)
120 W

Recommended Amp
15 - 120 W

Crossover Frequency / Slope
2.4 KHz @ 12 dB / Octave

Driver
1 x 8" C-CAM® cone bass driver featuring RST®
2 x 1" (25 mm) C-CAM® gold dome tweeter

Overall Diameter
286 mm (11 1/4 inch)

Overall Depth
161 mm (6 5/16 inch)

Cut-out Hole Diameter
247 mm (9 3/4 inch)

Mounting Depth
156.5 mm (6 3/16 inch)

Controls
+3db / 0dB / -3dB
High Frequency level switch & di-pole / bi-pole switch with addtional 12v trigger switching

Fixing Type
3 position Tri-Grip dog fixings

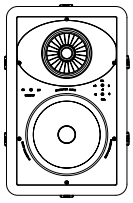
Cable Connection
Gold plated 'push' type terminals

Construction Material
Frame: Mineral filled ABS plastic (UL94-VO rated, RoHS compliant)
Baffle: Die-cast Aluminium

Pre-construction Bracket
CB8 (Green)

Weight Kg (lb)
3.2 Kg (7 lb)

W380-LCR



C-CAM® | RST® | IDC | Tri-Grip
H.F | M.F | Boundary

Frequency Response
42 Hz - 30 KHz

Impedance (nominal)
6 Ohms

Sensitivity (1W@1M)
90 dB

Maximum SPL
112 dBA

Power Handling (R.M.S)
150 W

Recommended Amp
15 - 150 W

Crossover Frequency / Slope
Mid: 250 Hz @ 6 dB / Octave
High: 3 KHz @ 12 dB / Octave

Driver
1 x 8" C-CAM® cone bass driver featurung RST®
Pivoting inverted dual concentric module (IDC) housing:- 1 x 4" C-CAM® RST® 'inverted' mid-range driver
1 x 1" (25 mm) C-CAM® gold dome tweeter

Overall Dimensions
423 mm x 270 mm
(16 5/8 x 10 5/8 inch)

Overall Depth
103 mm (4 1/16 inch)

Cut-out Hole Size
387 mm x 234 mm
(15 1/4 x 9 3/16 inch)

Mounting Depth
98.5 mm (3 7/8 inch)

Controls
+3db / 0dB / -3dB
High Frequency level switch;
+3db / 0dB / -3dB
Mid Frequency level switch &
Boundary Compensation switch

Fixing Type
6 position Tri-Grip dog fixings

Cable Connection
Gold plated 'push' type terminals

Construction Material
Frame: Mineral filled ABS plastic (UL94-VO rated, RoHS compliant)
Baffle: Die-cast Aluminium

Pre-construction Bracket
WB8 (Green)

Weight Kg (lb)
4.1 Kg (9 lb)

Declaration of Conformity

We, Monitor Audio Ltd.
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Rayleigh
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SS6 7XL
England

CE

Declare in own responsibility, that the products described in this manual are in compliance with technical standards:
EN 50082-1 : 1998
EN 55013 : 2001
EN 50020 : 2002

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MONITOR AUDIO®